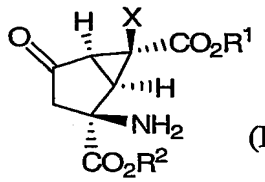
WHAT IS CLAIMED IS:

1. A process for preparing a compound of formula (IA):



(IA)

wherein $R^1$ and $R^2$ are each selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $-(CH_2)_n$ -phenyl

wherein n is 1 or 2, and said alkyl, cycloalkyl and phenyl are unsubstituted or substituted with one or more halogen, hydroxy, $C_{1-6}$ alkyl or $C_{1-6}$ alkoxy;

X is selected from the group consisting of

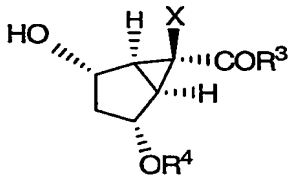
(1) halogen, and

(2) hydrogen; and

pharmaceutically acceptable salts thereof,

comprising:

(A) oxidizing a compound of formula (II):



(II)

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) -$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl , and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) halogen

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, ,$R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

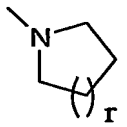
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group




wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl; and

$R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si\text{-}(R^9)(R^{10})(R^{11})$,

(4) $C(=O)\text{-}R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p\text{-}O\text{-}(CH_2)_q\text{-}X'\text{-}R^{14}$,

(7) tetrahyropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,

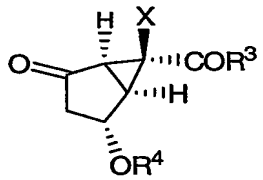
(b) $C_{1-10}$ alkyl,

p is 1 or 2;

q is an integer selected from 1-10; and

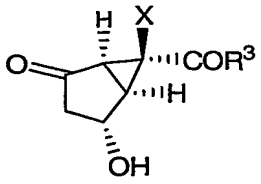
X' is O or a bond;

to form a compound of formula (IV):



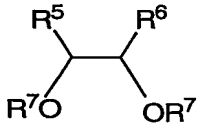

(IV)

(B) deprotecting the compound of formula (IV) to form a compound of formula (V):




(V)

(C) reacting the compound of formula (V) with a compound of formula (VI):




(VI)

wherein $R^5$ and $R^6$ are each independently selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $(CH_2)_m$ phenyl,

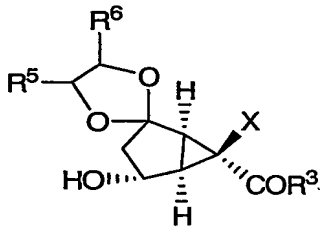
wherein m is 0, 1 or 2, and

$R^7$ is selected from the group consisting of

(1) hydrogen, and

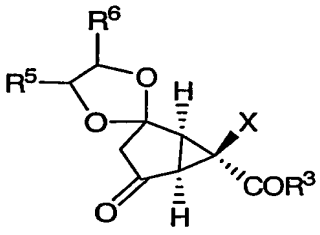
(2) Si-($R^9$)($R^{10}$)($R^{11}$), wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl;

to give a compound of formula (VII):



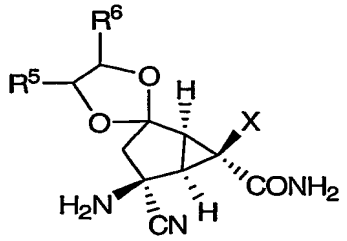

(VII)

(D) oxidizing the compound of formula (VII) to give a compound of formula (VIII):




(VIII)

(E) converting the compound of formula (VIII) to a compound of formula (IX):




(IX)

and (F) converting the compound of formula (IX) to the compound of formula (IA).

2. The process of Claim 1 wherein $R^5$ and $R^6$ are methyl.

3. The process of Claim 1 wherein $R^5$ and $R^6$ are phenyl.

4. The process of Claim 1 wherein $R^3$ is methoxy.

5. The process of Claim 1 wherein $R^1$ and $R^2$ are hydrogen.

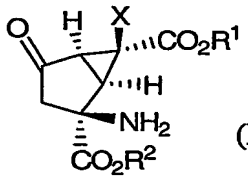
6. The process of Claim 1 wherein $R^7$ is trimethylsilyl.

7. The process of Claim 1 wherein X is hydrogen.

8. The process of Claim 1 wherein X is fluoro.

9. The process of Claim 1 wherein $R^4$ is *tert* butyldimethylsilyl.

10. A process for preparing a compound of formula (IA):




(IA)

wherein $R^1$ and $R^2$ are each selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $-(CH_2)_n$ –phenyl

wherein n is 1 or 2, and said alkyl, cycloalkyl and phenyl are unsubstituted or substituted with one or more halogen, hydroxy, $C_{1-6}$ alkyl or $C_{1-6}$ alkoxy;

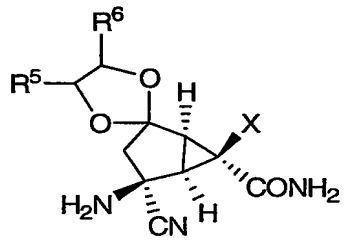
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen; and

pharmaceutically acceptable salts thereof;

comprising converting the compound of formula (IX):




(IX)

wherein $R^5$ and $R^6$ are each independently selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $(CH_2)_m$ –phenyl,

wherein m is 0, 1 or 2,

to the compound of formula (IA).

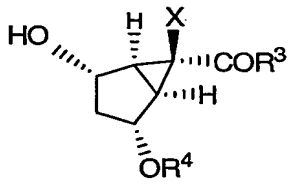
11. The process of Claim 10 wherein $R^5$ and $R^6$ are methyl.

12. The process of Claim 10 wherein $R^5$ and $R^6$ are phenyl.

13. The process of Claim 10 wherein X is fluoro.

14. The process of Claim 10 wherein X is hydrogen.

15. A process for preparing a compound of formula (II):




(II)

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) –$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl , and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ or $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

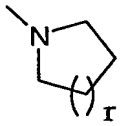
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

$R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si\text{-}(R^9)(R^{10})(R^{11})$,

(4) $C(=O)\text{-}R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p\text{-}O\text{-}(CH_2)_q\text{-}X'\text{-}R^{14}$,

(7) tetrahyropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl,

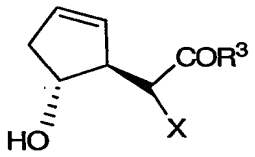
p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

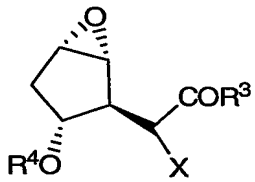
comprising:

(A) converting a compound of formula (X):




(X)

to a compound of formula (XI):




(XI)

and (B) reacting a compound of formula (XI) with a base in the presence of a Lewis acid to give a compound of formula (II).

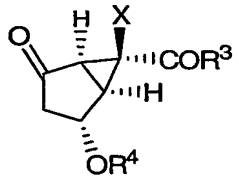
16. The process of Claim 5 wherein the conversion of a compound of formula (X) to a compound of formula (XI) comprises the step of subjecting a compound of formula (X) to epoxidation in the presence of a peroxide source and a catalytic amount of $VO(acac)_2$.

17. The process of Claim 5 wherein the conversion of a compound of formula (X) to a compound of formula (XI) comprises treating the compound of formula (X) with a halogenating agent, followed by treatment with a base.

18. The process of Claim 15 wherein X is fluoro.

19. The process of Claim 15 wherein X is hydrogen.

20. The process of Claim 5, further comprising the step of oxidizing the compound of formula (II) to form a compound of formula (IV)

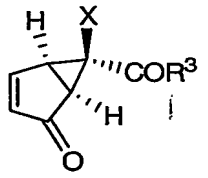



(IV)

21. The process of Claim 20 wherein X is fluoro.

22. The process of Claim 20 wherein X is hydrogen.

23. A process for preparing a compound of formula (XII)




(XII)

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) –$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl , and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

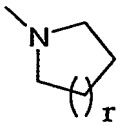
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group




wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

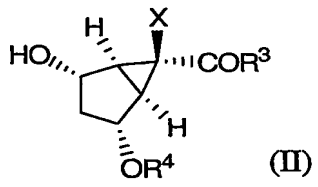
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

comprising:

(A) converting a compound of formula (II)




(II)

wherein $R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si\text{-}(R^9)(R^{10})(R^{11})$,

(4) $C(=O)\text{-}R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p\text{-}O\text{-}(CH_2)_q\text{-}X'\text{-}R^{14}$,

(7) tetrahyropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,

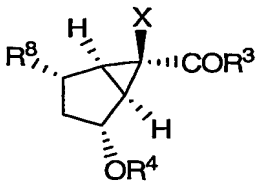
(b) $C_{1-10}$ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

to a compound of formula (XIII)




(XIII)

wherein $R^8$ is selected from the group consisting of

(1) halogen, and

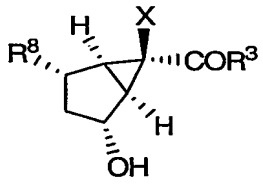
(2) O-$SO_2$-$R^{12}$ wherein $R^{12}$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl,

(b) $C_{1-10}$ perfluoroalkyl, or

(c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl, or $C_{1-10}$ alkoxy,

(B) removing $R^4$ to form a compound of formula (XIV)

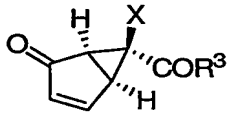



(XIV)

and (C) oxidizing the compound of formula (XIV) to form the compound of formula (XII).

24. The process of claim 23 wherein $R^3$ is methoxy.

25. A process for preparing a compound of formula (XII')




(XII')

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) –$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl , and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, and $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

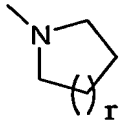
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are selected from the group consisting of hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

X is selected from the group consisting of

(1) halogen, and

(2) hydrogen; and

$R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si\text{-}(R^9)(R^{10})(R^{11})$,

(4) $C(=O)\text{-}R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p\text{-}O\text{-}(CH_2)_q\text{-}X'\text{-}R^{14}$,

(7) tetrahyropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,

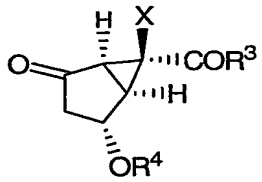
(b) $C_{1-10}$ alkyl;

p is 1 or 2;

q is an integer of from 1-10; and

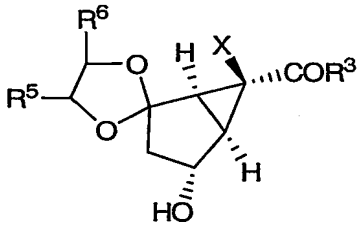
X' is O or a bond;

comprising converting a compound of formula (IV)


(IV)

to a compound of formula (XII').

26. A compound of formula (VII):


(VII);

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) –$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl , and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

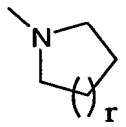
(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,
(b) $C_{1-10}$ alkyl, and
(c) $C_{3-8}$ cycloalkyl,
and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more
(i) hydroxy,
(ii) $C_{1-10}$ alkoxy,
(iii) $SR^d$,
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(vii) $NR^gR^h$ ;
wherein $R^g$ and $R^h$ are selected from the group consisting of hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl
$R^d$ is hydrogen or $C_{1-10}$ alkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more
(i) hydroxy,
(ii) $C_{1-10}$ alkoxy,
(iii) $SR^d$,
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(vi) $NR^gR^h$,

$R^5$ and $R^6$ are independently selected from the group consisting of
(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $(CH_2)_m$ –phenyl,

wherein m is 0, 1 or 2; and

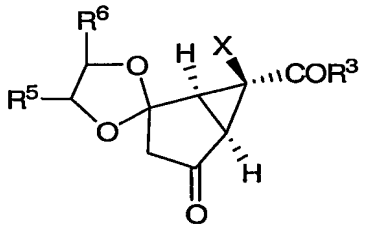
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

and salts thereof.

27. A compound of formula (VIII):



(VIII)

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$, and

(3) –$NR^bR^c$,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl, and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

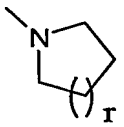
(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,
(b) $C_{1-10}$ alkyl, and
(c) $C_{3-8}$ cycloalkyl,
and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more
(i) hydroxy,
(ii) $C_{1-10}$ alkoxy,
(iii) $SR^d$,
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(vi) $NR^gR^h$;
wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;
$R^d$ is hydrogen or $C_{1-10}$ alkyl;
or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more
(i) hydroxy,
(ii) $C_{1-10}$ alkoxy,
(iii) $SR^d$,
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(vi) $NR^gR^h$,

$R^5$ and $R^6$ are independently selected from the group consisting of
(1) hydrogen,
(2) $C_{1-10}$ alkyl,
(3) $C_{3-8}$ cycloalkyl, and

(4) $(CH_2)_m$ phenyl,

wherein m is 0, 1 or 2; and

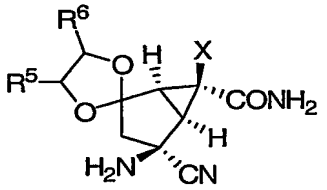
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

and salts thereof.

28. A compound of formula (IX):



(IX)

wherein $R^5$ and $R^6$ are independently selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $C_{3-8}$ cycloalkyl, and

(4) $(CH_2)_m$ –phenyl,

wherein m is 0, 1 or 2; and

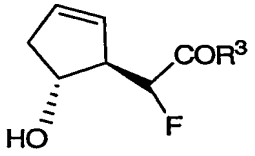
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

and salts thereof.

29. A compound of formula (XA):



(XA)

wherein $R^3$ is selected from the group consisting of

(1) –OH,

(2) –O-$R^a$ , and

(3) $-NR^bR^c$,

wherein $R^a$ is selected from the group consisting of

(a) $C_{1-10}$ alkyl, and

(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more

(i) $C_{1-10}$ alkoxy,

(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

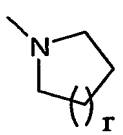
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group



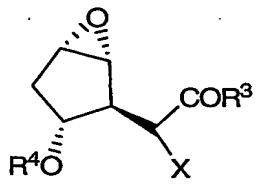
wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,
(ii) $C_{1-10}$ alkoxy,
(iii) $SR^d$,
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and
(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

and salts thereof.

30. A compound of formula (XI):




(XI)

wherein $R^3$ is selected from the group consisting of

(1) –OH,
(2) –O-$R^a$ , and
(3) –$NR^bR^c$ ,

wherein $R^a$ is selected from the group consisting of
(a) $C_{1-10}$ alkyl , and
(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more
(i) $C_{1-10}$ alkoxy,
(ii) hydroxy,
(iii) halogen,
(iv) $SR^d$,
(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

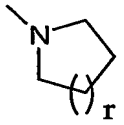
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group




wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

$R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si-(R^9)(R^{10})(R^{11})$,

(4) $C(=O)-R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p-O-(CH_2)_q-X'-R^{14}$,

(7) tetrahyropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

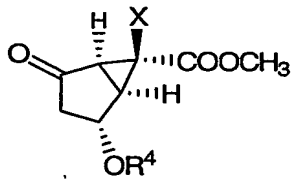
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

and salts thereof.

31. A compound of formula (IVA):




(IVA)

wherein X is selected from the group consisting of

(1) halogen, and

(2) hydrogen; and

$R^4$ is selected from the group consisting of

(1) hydrogen,
(2) $C_{1-10}$ alkyl,
(3) Si-($R^9$)($R^{10}$)($R^{11}$),
(4) C(=O)-$R^{12}$,
(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,
(6) $(CH_2)_p$-O-$(CH_2)_q$ –X'-$R^{14}$, and
(7) tetrahyropyranyl,

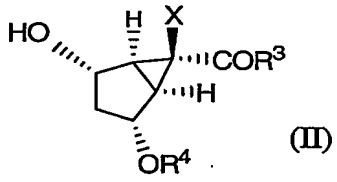
wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and $R^{14}$ is selected from the group consisting of

(a) hydrogen,
(b) $C_{1-10}$ alkyl,

p is 1 or 2;
q is an integer of from 1-10; and
X' is O or a bond;

and salts thereof.

32. A compound of formula (II):




(II)

wherein $R^3$ is selected from the group consisting of
(1) –OH,
(2) –O-$R^a$, and
(3) –N$R^b R^c$,

wherein $R^a$ is selected from the group consisting of
(a) $C_{1-10}$ alkyl, and
(b) $C_{3-8}$ cycloalkyl,

and $R^a$ is unsubstituted or substituted with one or more
(i) $C_{1-10}$ alkoxy,
(ii) hydroxy,

(iii) halogen,

(iv) $SR^d$,

(v) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen,

(vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vii) $NR^eR^f$;

$R^b$, $R^c$, $R^e$ and $R^f$ are selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl, and

(c) $C_{3-8}$ cycloalkyl,

and when $R^b$, $R^c$, $R^e$ and $R^f$ are $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl, said $C_{1-10}$ alkyl and $C_{3-8}$ cycloalkyl are unsubstituted or substituted with one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

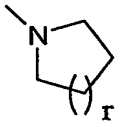
(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$;

wherein $R^g$ and $R^h$ are hydrogen, $C_{1-10}$ alkyl or $C_{3-8}$ cycloalkyl;

or $R^b$ and $R^c$, together with the N atom to which they are attached, form a group




wherein r is 1 or 2, and the $NR^bR^c$ group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) $C_{1-10}$ alkoxy,

(iii) $SR^d$,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, $C_{1-10}$ alkoxy, $C_{1-10}$ alkyl or halogen, and

(vi) $NR^gR^h$,

$R^d$ is hydrogen or $C_{1-10}$ alkyl;

$R^4$ is selected from the group consisting of

(1) hydrogen,

(2) $C_{1-10}$ alkyl,

(3) $Si-(R^9)(R^{10})(R^{11})$,

(4) $C(=O)-R^{12}$,

(5) $CH_2$-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, $C_{1-10}$ alkyl and $C_{1-10}$ alkoxy,

(6) $(CH_2)_p-O-(CH_2)_q-X'-R^{14}$, and

(7) tetrahydropyranyl,

wherein $R^9$, $R^{10}$ and $R^{11}$ are each $C_{1-10}$ alkyl or phenyl, and

$R^{14}$ is selected from the group consisting of

(a) hydrogen,

(b) $C_{1-10}$ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

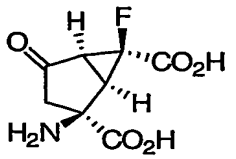
X is selected from the group consisting of

(1) halogen, and

(2) hydrogen;

and salts thereof.

33. A compound which is:



HCl

34. A polymorphic form of the compound of Claim 34 wherein the polymorphic form has a d-spacing determined by x-ray powder diffraction, CuK alpha, of about 5.37 angstroms.

35. The polymorphic form of Claim 35, which has at least one additional d-spacing determined by x-ray powder diffraction, CuK alpha, of about 4.52, 4.05, 3.84, 3.37, 2.96, 2.73, 2.67, 2.59 or 2.42 angstroms.

36. A polymorphic form of the compound of Claim 34, wherein the polymorphic form has a Differential Scanning Calorimetry extrapolated onset melting temperature of about 184°C.